

Fact Sheet: High-Protein, Low-Carbohydrate Diet Inappropriate for Children

- High-protein, low-carbohydrate diets, such as the Atkins diet, are based on the idea that carbohydrates are “bad” and that many people gain weight when they eat them. The truth is that people are gaining weight because of eating more total calories and getting less physical activity.
- It is the limiting of calories consumed, and not the elimination of foods from specific food groups, that is contributing to the weight loss individuals experience on diets such as the low-carbohydrate diet.
- High-protein, low-carbohydrate diets tend to be low in calcium, B vitamins, and fiber, as well as healthy phytochemicals (plant chemicals.) Eliminating food groups simply decreases variety and nutrition, not weight.
- Carbohydrates are sugars and starches, which provide glucose to the body. Glucose is a major source of energy for red blood cells, the brain, heart, and central nervous system.
- Potential long-term side effects of extreme high-protein, low-carbohydrate diets in adults include heart disease, bone loss, and kidney damage. Effects on children are unclear.

Healthy Lifestyle Tips:

At Home

- Provide time and encouragement for children to get 60 minutes of physical activity most days of the week.
- Offer children a variety of foods low in added sugars and fats to provide vitamins, minerals, fiber, and phytochemicals, all of which may help reduce chronic disease risk. These foods should include fruits, vegetables, and whole grain products.
- USDA nutrition guidelines encourage a variety of foods from all food groups low in added sugars and fats, consumed in moderation, together with physical activity.
- Monitor portion sizes provided to children at meals and snacks.

At School

- Advocate for classroom nutrition education which supports and encourages consumption of foods from all food groups offered in school meals.
- Fruits and vegetables are the foods most likely to be declined or not consumed by children in school meals. Provide suggestions and activities to encourage children to try new foods.
- USDA school nutrition guidelines require schools to provide balanced, nutritious meals featuring a variety of foods from all food groups, provided in age appropriate portion sizes and limited in added fat. A 2001 study showed that kids who eat school lunch consume fewer calories from fat and more fruits, vegetables, and dairy products than kids who eat a typical bag lunch.
- Limit but do not eliminate children's access to carbohydrates in the form of added sugars. Recent research indicates that foods with added sugars are contributing to excess calorie consumption in children's diets. Provide acceptable substitutions such as fresh fruits and vegetables and whole grain products (with little or no added sugars and fats.)
- Encourage the school to limit children's access to foods with added sugar's and fats such as sodas, cookies, and candies eaten between meals, as classroom rewards, at classroom parties or sold as fundraisers.
- Encourage the school to adopt guidelines for snacks which provide healthful choices such as fresh fruit, milk, cheese and whole wheat crackers, or vegetables and dip.

Bottom Line:

Rather than restricting carbohydrates in a child's diet, unless necessary for food allergies or some other medical condition, assist children in making healthy choices in their diets and physical activity. Advocate for a school nutrition environment that allows children to Eat Smart and Play Hard.

Resources:

1. American Dietetic Association Fact Sheet: Fad Diets: What You May Be Missing Recipe.
2. “Carbohydrates: The New Cause of Obesity?” presentation by Chris Melby, Dr.P.H., Professor and Department Head, Department of Food Science and Human Nutrition, Colorado State University.
3. Position of the American Dietetic Association: Weight Management. *J Am Diet Assoc.* 2002; 102:1145-55.
4. Produce for Better Health Foundation. *State of the Plate: Study on America’s Consumption of Fruits and Vegetables*, 2003, NPD National Eating Trends.
5. Rainville A. Nutritional Quality of Reimbursable School Lunches Compared to Lunches Brought From Home in Elementary Schools in Two Southeastern Michigan Districts. *J of Child Nutrition and Management.* Spring 2001.
6. USDA/DHHS. *Nutrition and Your Health: Dietary Guidelines for Americans*. 5th ed. Washington, DC: USDA; 2000.

More Resources:

Team Nutrition: To help meet the goal of healthier children, USDA launched Team Nutrition. The web site can be found at:

www.fns.usda.gov/tn Some of the resources you’ll find there include:

- “Fun Tips: Using the Dietary Guidelines at Home”
- “Making Nutrition Count for Children” – geared toward child care age
- “The School Environment: Helping Students Learn to Eat Healthy”